

### **Abstract**

**The invention provides a new authentication system which is capable of not being deceived by copied images and excellent in authentication accuracy and convenience. An image with built-in authentication information to be used for authentication is emitted by an emission angle-dependent light emitting device while being diffracted at a specified angle. An emission angle-dependent light detector 22 collects a diffracted light, and a control device 23 converts it into an image in the form of an electrical signal. The image in the form of an electrical signal is used for authenticating.**